

REMARKS

Claims 18-35 are pending. Claims 22-32 have been amended, as discussed below, to recite that the "difference" refers to the amino acid sequence differences.

It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance. Reconsideration of the application in view of the above amendments and the following remarks is requested.

I. The Rejection of Claims 18 and 19-35 under 35 U.S.C. 112

Claims 18 and 19-35 are rejected under 35 U.S.C. 112, second paragraph, as allegedly indefinite. The Examiner states that the claims are indefinite because they do not identify a SEQ ID NO: for the parent CGTase, and states that without it, it would be impossible to do a search and compare the amino acid sequence information. This rejection is respectfully traversed.

The claimed invention is directed to variants of a *Bacillus* cyclomaltodextrin glucanotransferase (CGtases). The specification lists many sources for the *Bacillus* CGTase, including, *Bacillus autolyticus*, *Bacillus cereus*, *Bacillus circulans*, *Bacillus circulans* var. *alkalophilus*, *Bacillus coagulans*, *Bacillus firmus*, a strain of *Bacillus halophilus*, *Bacillus macerans*, *Bacillus megaterium*, *Bacillus ohbensis*, *Bacillus stearothermophilus*, and *Bacillus subtilis*. The Examiner may conduct a search based on any *Bacillus* CGTase, including any of the previously listed. However, with respect to a particular amino acid sequence, Applicants respectfully suggest that the Examiner consider the CGTase obtained from *B. circulans* strain 251. As noted in the specification, this CGTase is disclosed (along with other *Bacillus* CGtases) in Table 1 of US Patent No. 6,004,790 (and WO 96/33267) as Sequence (a). Applicants do not believe it is necessary to recite the specific sequence of the *B. circulans* strain 251 CGTase in the specification or claim, because it is readily available to the public.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 112. Applicants respectfully request reconsideration and withdrawal of the rejection.

II. The Rejection of Claims 19-21 under 35 U.S.C. 112

Claims 19-21 are rejected under 35 U.S.C. 112, second paragraph, as allegedly indefinite. The Examiner states that the phrase "derived from a *Bacillus*" is indefinite because it is uncertain if the term means "to isolate from or obtain from a source" or "to arrive at by reasoning, i.e., to deduce or infer" or "to produce or obtain from another substance." The Examiner also contends that it is not clear whether the term derived means "isolated from" or whether it encompasses

recombinants, variants and mutants of any CGTase of any bacteria, plant or animal or modified CGTase from any source and lab I d as "derived from Bacillus." This rejection is respectfully traversed.

The term "derived" is used and defined in the specification in accordance with its art recognized meaning. In particular, the term "derived" is defined in the specification on page 4, lines 4-8, as follows:

A CGTase variant or mutated CGTase of this invention may be considered a **functional derivative** of a precursor CGTase enzyme (i.e. the native, parental, or wild-type enzyme), and may be obtained by alteration of a DNA nucleotide sequence of a precursor gene or its derivatives, encoding the precursor enzyme.

The Examiner has proffered a number of possible meanings for the term "derived", including referencing what appears to be a number of generic dictionary definitions. However, such exercise is clearly not necessary to determine what this term means given that the term "derived" is clearly defined in the specification in accordance with its art recognized meaning.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 112. Applicants respectfully request reconsideration and withdrawal of the rejection.

III. The Rejection of Claims 22-31 under 35 U.S.C. 112

Claims 22-31 are rejected under 35 U.S.C. 112, second paragraph, as allegedly indefinite, on the basis that it is unclear what the term "difference" in the phrase "wherein the differences comprise" is referring to.

The phrase "wherein the differences comprise" is intended to refer back to the recitation in claim 1 "which differs from the amino acid sequence of a parent cyclomaltodextrin glucanotransferase." However, to further clarify this point, Applicants have adopted the Examiner's proposed amendments.


For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 112. Applicants respectfully request reconsideration and withdrawal of the rejection.

IV. Conclusion

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

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